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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,134	03/10/2004	Andrew Jay Skoog	041A.0009.U1(US)	4937
29683	7590	06/16/2006	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			SAVAGE, JASON L	
			ART UNIT	PAPER NUMBER
			1775	
DATE MAILED: 06/16/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/798,134

Applicant(s)

SKOOG ET AL.

Examiner

Jason L. Savage

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 15 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20040310.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

***Election/Restrictions***

Claims 15-16 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 3-28-06.

Applicant argues that the restriction was improper since a search and examination of the entire application can be made without serious burden to the Examiner and the claim 1 depends direct from the method of claim 1. However, as was set forth in the restriction requirement, additional search would be required for the non-elected invention of Group II that would not be required for the invention of Group I. Furthermore, although the claims of Group II depends directly from the independent claim of Group I, the product defined by the process by which it can be made is still a product claim. Since Applicant did not provide a basis for why the claimed product could not be formed by a materially different process such as that suggested by the Examiner, the restriction is proper and made FINAL.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nesbitt (US 2004/0115477) in view of Ring et al. (US 6,531,524).

Nesbitt teaches a method of electrostatically coating a gas turbine engine component such as a turbine fan blade with a powder coating wherein the coating is applied in dry form and produces a coating having enhanced uniformity and density in all areas despite the component to be coated having an odd or angular shape (par [0147]).

Nesbitt is silent to the powder being heated to melt and fuse particles of the powder coating to the turbine component and cure the powder coating. Ring teaches that it is known to apply powder coatings by electrostatic deposition wherein the particles are charged with a voltage or by the use of tribo-charging (col. 1, ln. 14-21). Ring further teaches that it is known to heat the powder coatings to melt and fuse the particles to form a cured coating (col. 1, ln. 21-27).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have subjected the coating of Nesbitt to post deposition processes such as those described by Ring including heating to melt and fuse the particles to form a cured coating since they are known steps when forming a powder coating using an electrostatic spray process.

Regarding claims 2-3, Nesbitt teaches the powder is electrostatically charged such as by tribo-charging (par [0147]).

Regarding claim 4, both Nesbitt and Ring teach that electrical grounding is employed and Ring explicitly recites that the grounding of the substrate component is employed (col. 1, ln. 15-17).

Regarding claims 5-7, Nesbitt teaches that the coatings may contain any suitable type of particle materials (par [0028]) including plastic (par [0029]), metal (par [0031]), and ceramics such as aluminum oxide (par [0034]).

Regarding claim 8, since Nesbitt teaches that the powder coating contains the same materials as disclosed in claim 5 and further teaches that the coating is for a turbine component, it is the position of the Examiner that the coating would meet the limitation of being as much of a thermal barrier as that claimed by Applicant.

Regarding claim 9, Nesbitt teaches the substrate may be cleaned (par [0022]).

Regarding claim 10, Nesbitt teaches an electrostatic spray process using conventional spray guns as one method of forming the coating (par [0147]).

Regarding claim 11, although Nesbitt does not explicitly recite the substrate in the turbine component is non-metallic, it would have been within the purview of one of ordinary skill in the art at the time of the invention to have recognized that a wide variety of materials could be employed with a reasonable expectation of success including non-metallic substrates such as is claimed.

Regarding claim 12, Nesbitt in view of Ring teaches the claim limitations as set forth above.

Regarding claims 13-14, Nesbitt and Ring are silent to the exact processing parameters used when subjecting the coated component to the heating step. However,

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it would have been within the purview of one of ordinary skill in the art to have selected a heating temperature and duration that would insure the powder material that is applied would be able to melt, fuse and subsequently form the cured coating layer as described by the prior art. Absent a teaching of the criticality or showing of unexpected results, the claimed heating temperature and time would not provide a patentable distinction over the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason L. Savage whose telephone number is 571-272-1542. The examiner can normally be reached on M-F 6:30-4:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jason Savage  
6-12-06



JENNIFER C. MCNEIL  
SUPERVISORY PATENT EXAMINER  
6/12/06